

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A system for remote monitoring and controlling of energy consumption of a facility, comprising:

a processor;

a database coupled to the processor, the database operable to receive and store energy consumption data associated with the facility;

a memory coupled to the processor;

an analysis engine residing in the memory and executable by the processor, the analysis engine operable to evaluate the energy consumption data and determine whether energy consumption operating parameters require modification to increase efficiency; and

a control engine residing in the memory and executable by the processor, the control engine operable to initiate operating parameter modification of an energy consumption system of the facility in response to a desired operating parameter modification;

the control engine further operable to modify a variable rate of energy consumption data collection at the facility in response to a predetermined event; and

the analysis engine further operable to analyze the predetermined event based on a first subset of the energy consumption data obtained before the predetermined event and a second subset of the energy consumption data obtained after the predetermined event.

2. (Original) The system of Claim 1, wherein the database receives the energy consumption data via an Internet communications network.

3. (Original) The system of Claim 1, wherein the database receives the energy consumption data from a data collector disposed at the facility.

4. (Original) The system of Claim 1, wherein database further receives and stores environmental data, and wherein the analysis engine is further operable to determine whether operating parameter modification is required using the environmental data.

5. (Original) The system of Claim 4, wherein the environmental data comprises environmental forecast information, and wherein the analysis engine is operable to determine whether operating parameter modification is required for the energy consumption system using the environmental forecast information.

6. (Original) The system of Claim 1, further comprising a reporting engine residing in the memory and executable by the processor, the reporting engine operable to generate an energy consumption report based on the energy consumption data.

7. (Original) The system of Claim 1, further comprising a validation engine residing in the memory and executable by the processor, the validation engine operable to validate the energy consumption data.

8. (Original) The system of Claim 7, wherein the validation engine is operable to validate the energy consumption data using environmental data.

9. (Original) The system of Claim 7, wherein the validation engine is operable to validate the energy consumption data using historical energy consumption data associated with the facility.

10. (Canceled)

11. (Canceled)

12. (Original) The system of Claim 1, further comprising a plurality of data collectors disposed at the facility and operable to acquire energy consumption information associated with the facility.

13. (Original) The system of Claim 12, wherein the data collectors are coupled together, and wherein one of the data collectors is operable to transmit the respective acquired energy consumption information to another data collector.

14. (Original) The system of Claim 13, wherein the one data collector is operable to transmit the respective acquired energy consumption information in response to a predetermined event.

15. (Currently Amended) A method for remote monitoring and controlling of energy consumption of a facility, comprising:

receiving energy consumption data associated with the facility at a processor disposed remotely from the facility;

receiving environmental data associated with the facility;

determining whether an operating parameter of an energy consumption system of the facility requires modification to increase efficiency using the energy consumption data and the environmental data; and

automatically modifying the operating parameter of the energy consumption system corresponding to the required modification;

automatically modifying a variable rate of energy data collection at the facility in response to a predetermined event; and

automatically analyzing the predetermined event based on a first subset of the energy consumption data obtained before the predetermined event and a second subset of the energy consumption data obtained after the predetermined event.

16. (Original) The method of Claim 15, wherein receiving the energy consumption data comprises receiving the energy consumption data via an Internet communications network.

17. (Original) The method of Claim 15, wherein receiving the energy consumption data comprises receiving the energy consumption data from a data collector disposed at the facility.

18. (Original) The method of Claim 15, wherein receiving the environmental data comprises receiving environmental forecast information, and wherein determining comprises

determining whether the operating parameter of the energy consumption system of the facility requires modification using the environmental forecast information.

19. (Original) The method of Claim 15, further comprising generating an energy consumption report based on the energy consumption data.

20. (Original) The method of Claim 15, further comprising validating the energy consumption data.

21. (Original) The method of Claim 20, wherein validating comprises comparing the energy consumption data to historical energy consumption information.

22. (Original) The method of Claim 15, further comprising:
determining whether a value of the energy consumption data remains substantially constant for a predetermined time period; and
validating the energy consumption data if the value remains substantially constant for the predetermined time period.

23. (Original) The method of Claim 15, further comprising:
determining whether a value of the energy consumption data exceeds a predetermined range for the energy consumption data; and
validating the energy consumption data if the value exceeds the predetermined range.

24. (Canceled)

25. (Canceled)

26. (Original) The method of Claim 15, further comprising providing a plurality of data collectors coupled together at the facility, and wherein receiving the energy consumption data comprises receiving the energy consumption data from the data collectors.

27. (Original) The method of Claim 26, further comprising:
determining whether a predetermined event occurs associated with energy consumption data loss; and

automatically transmitting energy consumption information acquired by one of the data collectors to another data collector in response to the occurrence of the predetermined event.

28. (Currently Amended) A system for remote monitoring and controlling of energy consumption of a facility, comprising:

a processor;

a plurality of data collectors disposed at the facility, the plurality of data collectors operable to automatically transmit energy consumption data to the processor, the energy consumption data associated with an energy consumption system of the facility;

a memory coupled to the processor; ~~and~~

each of the data collectors further operable to store a history of energy consumption data values for a predetermined time period and to transmit a predetermined quantity of the energy consumption data values occurring prior to and after a predetermined event to the processor after the occurrence of the predetermined event; and

an analysis engine residing in the memory and executable by the processor, the analysis engine operable to evaluate the energy consumption data and determine energy consumption efficiency of the system, the analysis engine further operable to determine whether an operating parameter modification to the system would result in an energy consumption efficiency increase, the analysis engine further operable to analyze the predetermined event based on the energy consumption data values.

29. (Original) The system of Claim 28, wherein the plurality of data collectors is operable to automatically transmit the energy consumption data via an Internet communications network to the processor.

30. (Original) The system of Claim 28, wherein the data collectors are coupled together, and wherein each of the data collectors is operable to share energy consumption data with another data collector.

31. (Previously Presented) The system of Claim 28, further comprising a control engine residing in the memory and executable by the processor, the control engine operable to initiate a modification to a variable rate of data collection by the data collectors.

32. (Canceled)

33. (Canceled)

34. (Currently Amended) The system of Claim 28 ~~Claim 33~~, wherein each of the data collectors is operable to determine an average energy consumption data value for a predetermined time interval and transmit the average energy consumption data value to the processor if the predetermined event does not occur.

35. (Currently Amended) The system of Claim 28 ~~Claim 32~~, wherein each of the data collectors is operable to transmit the respective energy consumption data to another data collector upon the occurrence of a predetermined event.

36. (Original) The system of Claim 28, wherein the processor is further operable to access an environmental service to retrieve environmental data associated with the facility, and wherein the analysis engine is further operable to evaluate the system using the environmental data and the energy consumption data.

37. (Original) The system of Claim 28, further comprising a control engine residing in the memory and executable by the processor, the control engine operable to initiate the operating parameter modification of the energy consumption system.

38. (New) A system for remote monitoring and controlling of energy consumption of a facility, comprising:

a processor;

a database coupled to the processor, the database operable to receive and store energy consumption data associated with the facility;

a memory coupled to the processor;

an analysis engine residing in the memory and executable by the processor, the analysis engine operable to evaluate the energy consumption data and determine whether energy consumption operating parameters require modification to increase efficiency;

a control engine residing in the memory and executable by the processor, the control engine operable to initiate operating parameter modification of an energy consumption system of the facility in response to a desired operating parameter modification;

the control engine further operable to modify a variable rate of energy consumption data collection at the facility in response to a predetermined event;

the analysis engine further operable to analyze the predetermined event based on a first subset of the energy consumption data obtained before the predetermined event and a second subset of the energy consumption data obtained after the predetermined event; and

a validation engine residing in the memory and executable by the processor, the validation engine operable to validate the energy consumption data.

39. (New) The system of Claim 38, wherein the validation engine is operable to validate the energy consumption data using environmental data.

40. (New) The system of Claim 38, wherein the validation engine is operable to validate the energy consumption data using historical energy consumption data associated with the facility.

41. (New) A method for remote monitoring and controlling of energy consumption of a facility, comprising:

receiving, from a data collector disposed at the facility, energy consumption data associated with the facility at a processor disposed remotely from the facility;

receiving environmental data associated with the facility;

determining whether an operating parameter of an energy consumption system of the facility requires modification to increase efficiency using the energy consumption data and the environmental data;

automatically modifying the operating parameter of the energy consumption system corresponding to the required modification;

automatically modifying a variable rate of energy data collection at the facility in response to a predetermined event;

automatically analyzing the predetermined event based on a first subset of the energy consumption data obtained before the predetermined event and a second subset of the energy consumption data obtained after the predetermined event; and

validating the energy consumption data.

42. (New) The method of Claim 41, wherein validating comprises comparing the energy consumption data to historical energy consumption information.

43. (New) The method of Claim 41, further comprising:

determining whether a value of the energy consumption data remains substantially constant for a predetermined time period; and

validating the energy consumption data if the value remains substantially constant for the predetermined time period.

44. (New) The method of Claim 41, further comprising:

determining whether a value of the energy consumption data exceeds a predetermined range for the energy consumption data; and

validating the energy consumption data if the value exceeds the predetermined range.

45. (New) The method of Claim 41, further comprising:
determining whether the predetermined event is associated with energy consumption data loss; and
automatically transmitting energy consumption information acquired by the data collector to another data collector in response to the occurrence of the predetermined event.